

LAKE: MITCHELL P (VLMP 19)
TOWN: T07 R09 WELS
COUNTY: PISCATAQUIS

MIDAS: 9757
TRUE BASIN: 1
SAMPLE STATION: 1

WHOLE LAKE INFORMATION

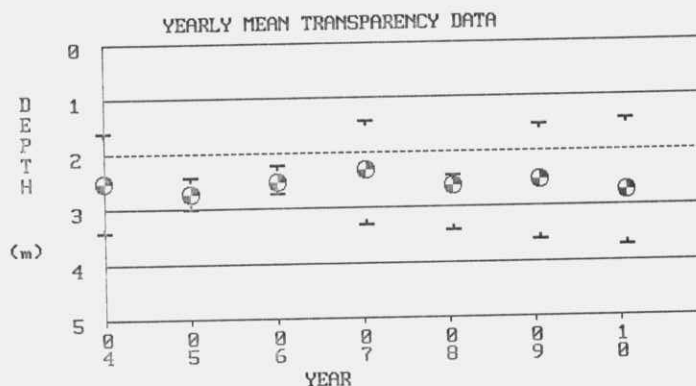
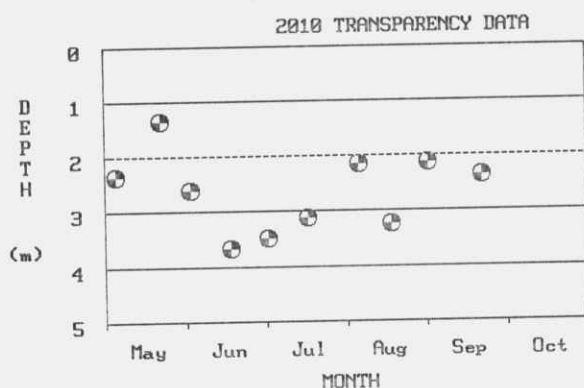
MAX. DEPTH: 5 m. (15 ft.)
MEAN DEPTH: 3 m. (9 ft.)
DELORME ATLAS #: 57
USGS QUAD: TROUT BROOK MOUNTAIN
IFW REGION F: Penobscot (Enfield)
IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 9.0 ha. (22.2 a.)
FLUSHING RATE: 1.03 flushes/yr.
VOLUME: 229552.1 cu. m. (186 ac.-ft.)
DIRECT DRAINAGE AREA: 0.36 sq. km. (0.14 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. MITCHELL P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:



Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visible at bottom of lake (or one reading used in calculation was visible)].

YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPIC STATE INDICES			
	COLOR	pH	ALK	COND.	EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	EPI PHOS			
	(SPU)		(mg/l)	(uS /cm)	CORE	GRAB	GRAB	GRAB								C	G	SEC	CHL
2004	-	-	-	-	-	-	-	-	1.6	2.5	3.4	5	-	-	-	-	-	-	-
2005	-	-	-	-	-	13	-	-	2.4	2.7	3.0	5	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	2.2	2.5	2.7	6	-	-	-	-	-	-	-
2007	39	7.52	17.1	40	-	13	-	-	1.4	2.3	3.3	5	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	2.4	2.6	3.4	5	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	1.5	2.5	3.6	5	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	1.4	2.7*	3.7*	5	-	-	-	-	-	-	-
SUMMARY:	39	7.52	17.1	40	-	13	-	-	1.4	2.5*	3.7*	7	-	-	-	-	-	-	-

WATER QUALITY SUMMARY

MITCHELL POND, T 7 R 9 WELS

Midas: 9757, Sample Station # 1

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Mitchell Pond have been collected since 2004. During this period, 1 year of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Mitchell Pond is considered to be below average, based on measures of SDT and total phosphorus (TP). The potential for nuisance algal blooms on Mitchell Pond is moderate.

Water Quality Measures: Mitchell Pond is a moderately to highly colored lake (average color 39 SPU) with an average SDT of 2.5m (8.2ft). The water column TP for Mitchell Pond is 13 parts per billion (ppb). Dissolved oxygen (DO) profiles have not been taken on this pond. Dissolved oxygen depletion can cause phosphorous to be released by sediments (internal loading) and oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species. Generally shallow ponds do not experience dissolved oxygen depletion however there could be some depletion due to natural processes related to the high color. Mitchell Pond is somewhat shallow thus sediments and phosphorus may be resuspended in the water column due to wind mixing. Mitchell Pond has had high levels of algal growth in the past.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at <http://www.lakesofmaine.org/> and/or <http://www.maine.gov/dep/blwq/lake.htm>, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

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